



Customer focus



Features



Hands-on



Interview



Spotlight



## Welcome

I'm pleased to present the latest edition of Connections – Perkins' exclusive newsletter for India.

As we all learn to work in this 'new normal' environment, we reiterate our commitment to doing everything we can to deliver for our customers and communities. Safety is a priority at Perkins.

Perkins has implemented safeguards in our facilities – social distancing practices and other measures consistent with specific regulatory requirements and guidance from health authorities. We continue to monitor the situation closely and remain focused on the

health and safety of our teams and network who continue to provide access to the services and support our customers need to get their jobs done.

This edition highlights continuity of our initiatives to connect with customers, consultants and end-users. We also hear from Jaz Gill on how Perkins is committed to serving its customers in India with world-class products. We round off the edition with a feature on the



**Abhinav Gupta**, regional marketing manager – South Asia

Perkins® 1100 Series and an article on the importance of coolant.

On behalf of the Perkins India team, I'd like to wish you, your family and friends a very happy and safe New Year 2021. Thank you for your continued support for Perkins. Please keep sending your comments and story ideas to [IPSD\\_India@perkins.com](mailto:IPSD_India@perkins.com)



## We are here to help...

Jaz Gill, Perkins Vice President shares a year-end message with our distributors, generator original equipment manufacturers and customers of Perkins-powered equipment.

Everything we do starts with putting people first. From the early stages of the COVID-19 pandemic, we have been taking appropriate preventive measures to protect the health and well-being of our customers, staff, families and community.

Our commitment has not wavered during these unprecedented times and I'm proud of how the team has worked to maintain customer service levels while always following COVID-19 protocols. The Perkins team continues to put a lot of effort into delivering customer support and spare parts distribution to enable our customers to keep delivering essential services to society, such as those who are using Perkins engines to power hospitals. We're also increasingly making effective use of virtual platforms to connect with our customers. A great example of this is the online knowledge sharing workshops that we've hosted with consultants.

Perkins remains committed to serving customers in India with world-class products and services.



As a business we continue to invest in new product developments and upgrades globally, driven both by a passion to provide our customers with increasingly efficient technologies and in response to regulatory change-over whenever and where it happens.

I'd like to thank the Perkins network, our customers and those who buy Perkins-powered equipment for their continued patronage.



# Coolant is liquid engineering – protecting your engine beyond the heat and cold

Coolant's use to keep your engine at the correct temperature is well known, but did you know it has many other benefits?

Coolant serves as a carrier for additives such as pH stabilisers, anti-foaming agents, and protection agents for rubber and plastic components. It also inhibits corrosion and protects against cavitation and cylinder pitting.

Using water or the wrong type of coolant puts your engine at risk.

Diesel engines fall into three types:

- Parent bore engines where the cylinder block is one piece
- Dry-sleeve or liner engines, where a liner is inserted into the block – typically found in automobile engines with aluminium blocks
- Wet-sleeve or liner engines which allow the sleeve (that contains the piston) to come in direct contact with the coolant. Wet sleeves allow more heat transfer than dry systems and are often found in larger diesel engines such as the Perkins® 1700 Series, 2000 Series and 4000 Series engines.

Wet-cylinder diesel engines transfer a lot of vibration and movement from the pistons to the cylinder walls and this can create coolant cavitation (tiny bubbles) behind the cylinder

walls. Cavitation can lead to pitting in the cylinder walls. The correct coolant can protect your engine by forming a barrier between the liner and these bubbles.

It's also important to use a high-quality coolant to protect the metal in your engine from corrosion. It is common to find six basic metal alloys within the engine's heat transfer system: copper, solder, brass, steel, cast iron and aluminium. All of these can corrode on contact with water, so water-based coolants need suitable corrosion additives. Without this, corrosion can cause blockages within the narrow spaces of radiators, as well as thinning and failure of pipes, and damage to water pumps, thermostats and operating valves.

## Coolant option

Coolants come in two major types:

- Standard heavy-duty, fully formulated products
- Long life or extended life coolants (LLC/ELC)

The main advantage of extended life coolants is that their service life is typically twice as long as double heavy duty fully formulated products, and they don't require

testing or the addition of corrosion protection additives.

## Perkins® Extended Life Coolant helps you manage service costs and protect your engine.

Benefits of Perkins® Extended Life Coolant include:

- Lasts at least twice as long as conventional coolants. Perkins ELC will last for 6,000 hours or three years
- Pre-mixed 50/50 coolant with purified water formula, eliminating the need to source de-ionised water
- Ensures the correct ratio of mix is maintained for top up
- Avoids the need to top-up with supplemental coolant additives (SCAs)
- Advanced formula technology with organic additive corrosion inhibitors
- Practically eliminates hard water deposits and extends water pump seal life

Know more about Perkins coolant [www.perkins.com/en\\_GB/aftermarket/maintenance/engine-fluids/coolant.html](http://www.perkins.com/en_GB/aftermarket/maintenance/engine-fluids/coolant.html)



# Customer case studies

Our customer case studies show how generator set manufacturers and end-users make use of Perkins extraordinary knowledge, engineering expertise, reputation for world-class performance and quality to power businesses, industry and public amenities among many other installations. We work closely with our original equipment manufacturers (OEMs) to provide the best power solutions.

A commitment to collaboration defines the Perkins approach to doing business. We work alongside you at every step of the process—from initial design, through validation and production, to ongoing support in the field—to deliver power, service and productivity in exactly the way you want it.

Please visit [www.perkins.com/en\\_GB/campaigns/perkins-in-india/case-studies.html](http://www.perkins.com/en_GB/campaigns/perkins-in-india/case-studies.html) to read some of our customer case studies in India.

For installations around the world, please visit [www.perkins.com/en\\_GB/resources/case-studies.html](http://www.perkins.com/en_GB/resources/case-studies.html)



# End user training on Perkins engines

Perkins distributors Powerparts Private Limited and Gmmco Power recently conducted a series of end-user focused web training sessions. In total, 10 sessions were held, attended by over 300 participants.

Every session was tailored as prior feedback had been obtained from customers on specific topics focusing on diesel engine architecture, the best engine maintenance practices, scheduled oil sampling and scheduled coolant analysis.

- Coverage map and customer support vision
- Engine fundamentals
- Engine systems – air, fuel, lubrication, cooling, electrical
- Care during operation

- Maintenance schedules and best maintenance practices
- Trouble shooting
- Maintenance during COVID-19 times

Participants included customers owning Perkins-powered industrial equipment and generating sets so Perkins® 400, 1100, 2000 and 4000 Series engines were covered in the sessions.



# Perkins India continue with wave of customer connect web workshops

The Perkins team along with their distributors and generator set OEMs continue to deliver online seminars and workshops to connect with key stakeholders in the electric power sector.

Due to precautions taken during the COVID-19 pandemic, in-person meetings are not possible, so the Perkins team in India have been successfully making use of web-based sessions to connect with our customers and consultants in the India electric power sector. These workshops and seminars would normally have been delivered face-to-face, but the online sessions have proved to be engaging for everyone taking part.

The workshops have covered a variety of topics:

- The sessions with distributor Gmmco Power and generator set OEM Supernova Generators, covered technical subjects including the value proposition and features of Perkins engines and factors influencing generating set sizing and industry best practise recommendations. Over 20 electric power consultant companies and key account customers from various cities participated in these sessions.

- The sessions with distributor Powerparts and generator set OEM Sterling Generators covered ISO standards, ventilation, cooling requirements and systems, acoustic design and systems and statutory regulations.

All sessions open with a presentation highlighting Perkins' heritage, global facilities and presence, the path to market in India and the support structure across the full customer experience cycle.

The overall feedback from the sessions was very positive.

Each session is designed to address a practical subject, and we're continually seeking input on future topics. Please write to us at [IPSD\\_India@perkins.com](mailto:IPSD_India@perkins.com) to connect with us and share your suggestions for topics you would like us to cover in the future.

To learn more about Perkins in India visit [www.perkins.com/india](http://www.perkins.com/india)





# 1100 Series

From the 3 cylinder 1103 range to the 6 cylinder 1106 range, this is a series of engines that gives unparalleled performance. The engines have exceptional reliability and low cost of ownership. Their trusted performance is borne out of thousands of hours of validation in the real world, working with agricultural, construction and electric power providers who value our reputation and expertise. Within the 1100 Series of industrial engines are mechanical and electronic units up to Stage IIIA/Tier 3 equivalent emissions standards.

Whatever your application, there's an 1104 engine for you. Part of the Perkins® 1100 Series, the range's 4 cylinder, 4.4 litre engines are smooth and quiet in operation. Designed to meet EU Stage II/IIIA and U.S. EPA Tier 2/ Tier 3 equivalent emissions standards, the 1104 range offers a choice of mechanical or electronically controlled common rail engines. Electronically controlled engines deliver the right fuel injection for the load applied to the engine. Common front and rear ends, connection points and components across the range, making it easy to install a different 1100 Series engine in your application.

## Product Specifications for 1104D-44T

General	
Number of Cylinders	4 inline
Cycle	4 stroke
Bore	105 mm
Stroke	127 mm
Displacement	4.4 l
Compression Ratio	18.2:1
Aspiration	Turbocharged
Combustion System	Direct injection
Rotation from Flywheel End	Anti-clockwise
Cooling System	Liquid

Power Rating	
Maximum Power	75 kW (101 bhp)
Maximum Torque	392 Nm @ 1400 rpm
Rated Speed	2200 rpm
Minimum Power	58.5 kW

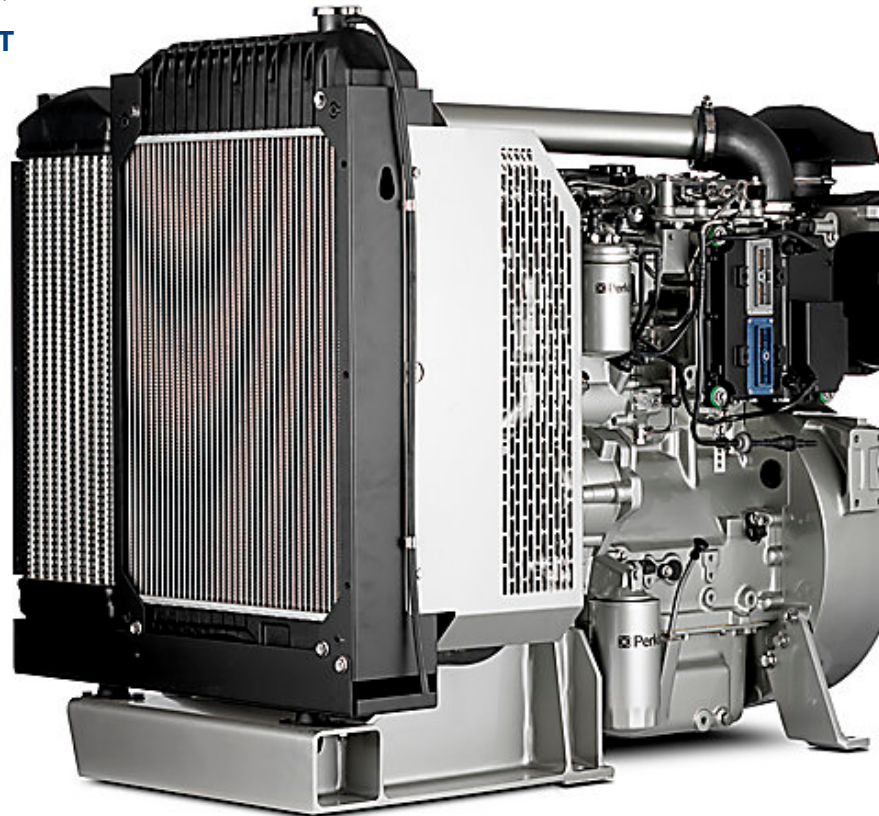
## Local support, global coverage

With Perkins network, you will find all the advice you need to ensure you get the right engine. By building strong relationships with you, we make sure you have access to the full power of the Perkins brand and expertise. Our fully trained experts deliver total service support 24/7, 365 days of the year.

The 1100 Series is manufactured at Perkins' facilities in India, United Kingdom, China and Brazil.

## Learn more

[www.perkins.com/en\\_GB/products/new/perkins/industrial/industrial-open-power-units/1000002387.html#](http://www.perkins.com/en_GB/products/new/perkins/industrial/industrial-open-power-units/1000002387.html#)



## Keep in contact with Perkins

We recently launched a dedicated area on our website, packed full of content on Perkins in India.

For all the latest information on Perkins visit [www.perkins.com/india](http://www.perkins.com/india)

We're also increasing our social reach, so please feel free to follow Perkins on:

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